

**Notice of Allowability****Application No.**

10/694,331

**Examiner**

B. Clayton McCraw

**Applicant(s)**

RAYBURN, RONALD RICHARD

**Art Unit**

3744

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/20/2003.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>9/15/2004</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Brian Sattizahn on 1/25/2006.
3. In line 1 of claim 9, the phrase "The method of claim 9" should be –The method of claim 8–.

### **REASONS FOR ALLOWANCE**

4. The following is an examiner's statement of reasons for allowance: As per claim 1, the prior art fails to teach a method of utilizing a first refrigerant circuit with a first compressor, first condenser, and first evaporator; a second refrigerant circuit with a second compressor, second condenser, and second evaporator; in particular, providing a hot gas reheat circuit enabled through a bypass of the first condenser, and the ability to satisfy two different degrees of cooling, humidity control, and simultaneous cooling and humidity control. As per claim 9, the prior art fails to teach the combination of a first refrigerant circuit with a first compressor, first condenser, and first evaporator; a second refrigerant circuit with a second compressor, second condenser, and second evaporator; a control system controlling the operation of the first, second, and hot gas reheat circuits, in particular, providing a hot gas reheat circuit enabled through a bypass of the

Art Unit: 3744

first condenser, and the ability to satisfy two different degrees of cooling, humidity control, and simultaneous cooling and humidity control.

Although Eber et al. (US 2002/0023443) teach a refrigeration circuit comprising a compressor (12), condenser (20), evaporator (44) and reheat coil (60), Eber et al. fail to teach a second refrigeration circuit, or the first circuit bypassing the condenser, allowing multiple stages of cooling, as well as simultaneous cooling and reheat, which is the one of the primary inventive features.

Although Alsenz (US 6,338,254) teaches two refrigeration circuits, circuit one comprising a compressor (10), a condenser (30), a reheat coil (60), and an evaporator (22); with circuit two comprising a compressor (10b), a condenser (30b), and an evaporator (220b), Alsenz fails to teach a bypass of the condenser to the reheat circuit as well as the ability to cool an environment on multiple stages. Most importantly, Alsenz' refrigeration circuits are explicitly designed to cool two separate environments.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Dressler et al. (US 5,953,926) teach a heating, cooling,


Art Unit: 3744

and dehumidifying system; and Backman et al. (US 6,321,551) teach secondary cooling for an ice rink.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. Clayton McCraw whose telephone number is (571) 272-3665. The examiner can normally be reached on M-F 8:30AM-5:00PM.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BCM  
1/24/2006



CHERYL TYLER  
SUPERVISORY PATENT EXAMINER